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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,765	03/28/2002	Stephan Appelt	TURKP 0118US	2593

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EXAMINER
SINES, BRIAN J

ART UNIT	PAPER NUMBER
1743	

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/018,765	APPELT ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Brian J. Sines	1743	

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –  
Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                                   |                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                              | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.                                                |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "valves" in line 1. There is insufficient antecedent basis for this limitation in the claim.

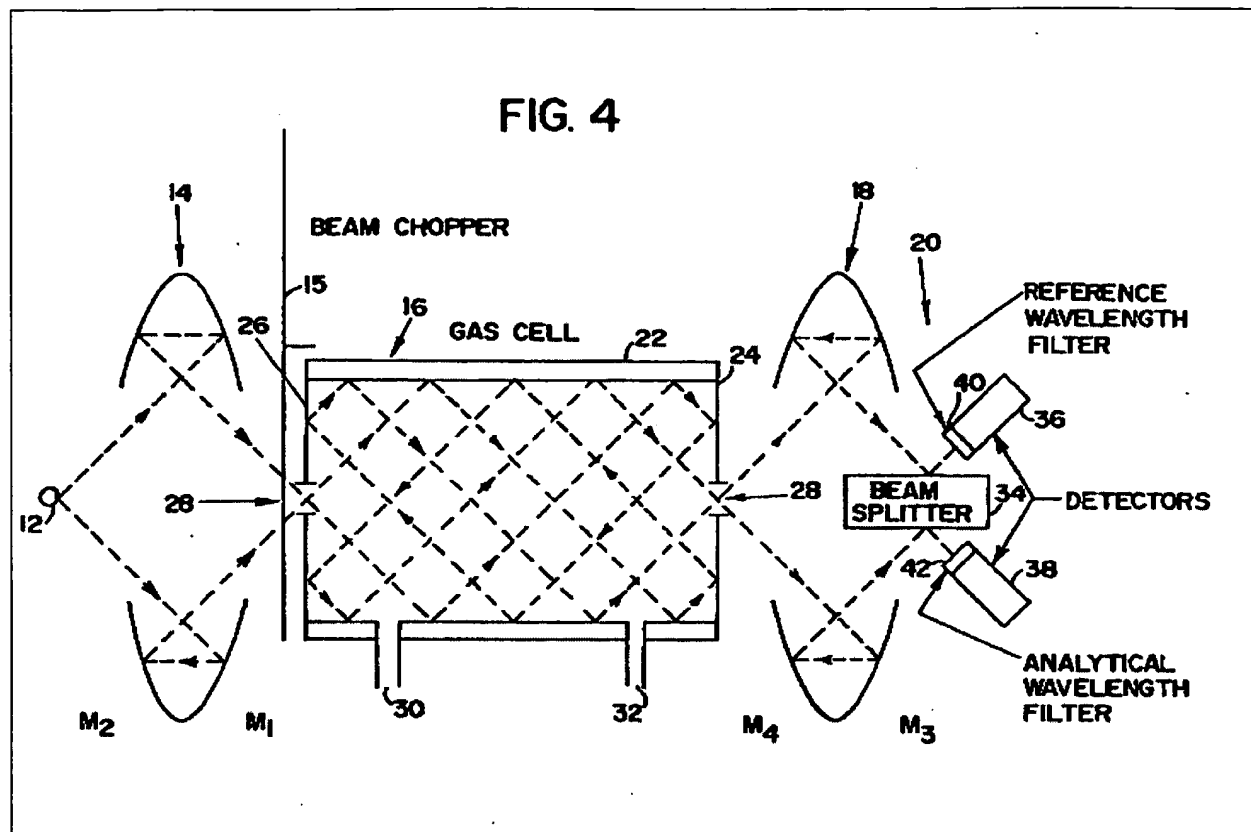
### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 4, 6 – 8 & 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Wilks, Jr. (U.S. Pat. No. 5,125,742 A) (hereinafter “Wilks”). Wilks anticipates the claimed cylindrical glass sample cell (16) comprising plane glass windows (28) (see figure 2 – 4; col. 3, lines 25 – 68). Claims 8 and 12 recite limitations directed to an intended use.



*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilks in view of Ostrander *et al.* (U.S. Pat. No. 6,368,560 B1) (hereinafter “Ostrander”) and Damen *et al.* (U.S. Pat. No. 5,886,463 A) (hereinafter “Damen”). Wilks does not specifically teach the use of either borosilicate or borofloat glass in fabricating the claimed apparatus. Ostrander does teach a sample cell manufactured from borosilicate glass (see col. 3, lines 39 – 48). In addition, Damen does teach the use of borofloat glass as a transparent material, which is suitable for use as a window material (see col. 10, lines 14 – 23). The Courts have held that the selection of a known material, which is based upon its suitability for the intended use, is within the ambit of one of ordinary skill in the art. See *In re Leshin*, 125 USPQ 416 (CCPA 1960) (see MPEP § 2144.07). Therefore, it would have been obvious to a person of ordinary skill in the art to utilize a borosilicate and borofloat glass in the fabrication of the sample cell as recited in claim 5.

2. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilks. Wilks does not specifically teach the formation of a fused joint in manufacturing the claimed apparatus. However, since the component parts of the apparatus are made of glass, a person of ordinary skill in the art would have recognized the suitability of utilizing heat to fuse the glass parts together to form a securely fused joint for the apparatus. A person of ordinary skill in the art would accordingly have had a reasonable expectation for success of utilizing heat to fuse these glass components together. Therefore, it would have been obvious to a person of ordinary skill in the art to utilize heat to fuse the glass parts together to form a securely fused joint for the apparatus.

3. Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilks in view of Yokokawa *et al.* (U.S. Pat. No. 5,785,729 A) (hereinafter “Yokokawa”). Wilks does not

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specifically teach the use of grinding or cleaning with hydrofluoric acid prior to the formation of a fused joint in manufacturing the claimed apparatus. However, as evidenced by Yokokawa, grinding a glass article and washing the glass article with hydrofluoric acid prior to fusing is a technique that is well known in the art glass article manufacture (see, e.g., col. 11, line 63 – col. 12, line 21). A person of ordinary skill in the art would have recognized the suitability of utilizing such treatment steps prior to heat-fused joint formation. Therefore, it would have been obvious to a person of ordinary skill in the art to provide for the method of fabrication as recited in claim 11 in order to ensure an effective and secure seal between the component glass parts of the apparatus.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited prior art teach various sample cell devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Sines, Ph.D. whose telephone number is (571) 272-1263. The examiner can normally be reached on Monday - Friday (11 AM - 8 PM EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Brian J. Smith". The signature is written in a cursive, flowing style with a large initial "B".